

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/11271

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/44 A61K31/137 A61K31/704 A61K31/335 A61K31/4745  
A61P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | FAGIN J A: "Perspective: Lessons learned from molecular genetic studies of thyroid cancer: Insights into pathogenesis and tumor-specific therapeutic targets"<br>ENDOCRINOLOGY, BALTIMORE, MD, US,<br>vol. 143, no. 6, June 2002 (2002-06),<br>pages 2025-2028, XP002251224<br>ISSN: 0013-7227<br>page 2026, right-hand column, paragraph 2<br>---<br>-/-- | 1,11                  |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

3 February 2004

Date of mailing of the international search report

26/02/2004

Name and mailing address of the ISA

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 PCT/EP 03/11271

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | LEVITZKI A: "Tyrosine kinases as targets for cancer therapy"<br>EUROPEAN JOURNAL OF CANCER, PERGAMON PRESS, OXFORD, GB,<br>vol. 38, September 2002 (2002-09), pages S11-S18, XP004402495<br>ISSN: 0959-8049<br>page S14, right-hand column<br>figure 3<br>---  | 1,2,11                |
| X          | SELLE B ET AL: "ABL-specific tyrosine kinase inhibitor imatinib as salvage therapy in a child with Philadelphia chromosome-positive acute mixed lineage leukemia (AMLL)"<br>LEUKEMIA (BASINGSTOKE),<br>vol. 16, no. 7, July 2002 (2002-07), pages 1393-1395, XP002268892<br>ISSN: 0887-6924<br>page 1394, right-hand column, last paragraph<br>--- | 1,2,11                |
| X          | CAPDEVILLE R ET AL: "Imatinib: the first 3 years"<br>EUROPEAN JOURNAL OF CANCER, PERGAMON PRESS, OXFORD, GB,<br>vol. 38, September 2002 (2002-09), pages S77-S82, XP004402504<br>ISSN: 0959-8049<br>page S79, right-hand column, paragraph 2<br>page D80, left-hand column, paragraph 2<br>---   | 1,2,10,<br>11         |
| Y          |  | 1-11                  |
| X          | KANO Y ET AL: "IN VITRO CYTOTOXIC EFFECTS OF A TYROSINE KINASE INHIBITOR STI571 IN COMBINATION WITH COMMONLY USED ANTILEUKEMIC AGENTS"<br>BLOOD, W.B.SAUNDERS COMPAGNY, ORLANDO, FL, US,<br>vol. 97, no. 7, 1 April 2001 (2001-04-01), pages 1999-2007, XP001035243<br>ISSN: 0006-4971<br>page 1999, abstract<br>---                               | 1,2,10,<br>11         |
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Inter national Application No  
PC 1, EP 03/11271

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| Y          | EP 0 564 409 A (CIBA GEIGY AG)<br>6 October 1993 (1993-10-06)<br>page 5, line 36 - line 38<br>---   | 4                     |
| Y          | US 5 521 184 A (ZIMMERMANN JUERG)<br>28 May 1996 (1996-05-28)<br>column 7, line 44 - line 45<br>column 8, line 6 - line 7<br>column 9, line 1 - line 4<br>----- | 4                     |

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onal application No.  
CT/EP 03/11271

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claim 11 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box I.2

Present claims 4 - 6 and 11 relate to a compound defined by reference to a desirable characteristic or property, namely "anticancer agent". The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the following compounds: mitoxanthrone, doxorubicin, topotecan, irinotecan, 7-ethyl-10-hydroxycamptothecin, 9-amino-camptothecin, 9-nitrocamptothecin, lurtotecan, diflomotecan, BAY38-3441, BNP1350, DB67, CT2016, DE310, T-0128 and prothecan (page 5 of the description).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

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| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date        |
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